**Application No.:** 10/617,844

Office Action Dated: October 20, 2004

## **REMARKS**

Entry of this response and reconsideration and allowance of the above-identified patent application are respectfully requested. Claims 7 and 9 were rejected in the office action. Claims 8 and 10-20 were objected to in the office action. Claims 21-33 have been withdrawn. No claims have been amended or added. Therefore, following entry of the present response, claims 7-20 will be pending in the present application.

Applicants appreciate the Examiner's indication that claims 8 and 10-20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants would like to thank the Examiner for indicating the allowability of claims 8 and 10-20. Applicants respectfully request consideration of the allowability of the remaining claims.

With respect to the continued restriction requirement, applicants note that an election of a single species previously has been made, and therefore applicants have complied with 37 CFR § 1.143. The office action appears to require applicants to additionally admit that the "groups are not patentably distinct" in order to remove the restriction requirement.

Applicants do not believe that this is required under the law.

Applicants appreciate the detailed discussion provided in the office action. (Office Action dated October 20, 2004 at p. 2-3). While applicants acknowledge as "obvious" that "[d]igging two equal holes of the same size requires twice the effort of digging one hole," the MPEP notes that the decision to classify Groups I and II into the same class and subclass (i.e., class 324, subclass 142) is indicative of one "hole," not two. (Id.)

In particular, applicants note that section 808.02 of the MPEP clearly and specifically states:

Where, however, the classification is the same and the field of search is the same and there is no clear indication of separate future classification and field of search, no reasons exist for dividing among related inventions.

Without delving into further analogy, applicants respectfully request the Examiner to explain why this clear and unambiguous statement should be contravened.

The office action alleges that independent claim 7 contains certain limitations that describe "intended use," such that "no patentable weight" was given in considering the

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patentability of the claim. (Office Action dated October 20, 2004 at p. 4-5). In particular, the office action contends that the following language is purely functional and therefore an "intended use": "for measuring electrical energy usage over a wide dynamic range of service voltages, wherein the electrical energy meter is used by an electric utility for customer billing purposes," "can be connected to a polyphase . . ." and "capable of receiving any input voltage within the wide dynamic range of standard service voltages." (Office Action dated October 20, 2004 at p. 4-5).

With all due respect to the contentions in the office action, applicants respectfully disagree. Contrary to the assertions in the office action, such items are not merely statements of intended use. Instead, as discussed below, such items express additional structure for the power supply element of the electrical energy meter, and accordingly do not merely state an intended use, as the office action has asserted.

The MPEP notes that "[i]ntended use recitations and other types of functional language cannot be entirely disregarded" in an apparatus claim if the language results "in a structural difference between the claimed invention and the prior art." MPEP 2111.02.

Here, the language cited in the office action connotes structural limitations that distinguish the present invention from the prior art. In particular, although the office action attempts to parse the cited language from the rest of the claim language, this language must be read in light of the rest of the claim.

For example, with respect to the power supply element, the cited language "capable of receiving any input voltage within the wide dynamic range of standard service voltages," standing alone may be misconstrued to be purely function. However, when read in light of the rest of the claim, which the office action acknowledges includes additional structural limitations, it connotes sufficient structure to distinguish from the prior art. In particular, the claimed power supply does not just "receive any service voltage." The power supply also, inter alia, regulates the output to provide a predetermined output voltage independent of the input voltage. As is well known to those skilled in the art, a power supply that is capable of scaling any inputted service voltage and limiting its outputted voltage to a predetermined output voltage independent of the input voltage provides a defined structural difference between the claimed invention and the prior art. As discussed below, this is evident from the

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fact that Kraley does not describe regulating the output to provide a predetermined output voltage independent of the input voltage.

Furthermore, with respect to the recitation of "can be connected to a polyphase electrical service," again if read alone also may be misconstrued to be purely function. However, as above, when read in light of the rest of the claim, it connotes sufficient structure to distinguish from the prior art. In particular, the cited language is followed by "to measure electrical energy on more than one phase at a time." Therefore, it's not just that the electrical meter can be connected to more than one phase, it can also measure energy on those phases. This recitation also cooperates with the remainder of the claim language. As is well known to those skilled in the art, an electrical energy meter that an be connected to a polyphase system to measure energy on more than one phase dictates a defined structural difference between the claimed invention and the prior art.

Claims 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,055,803 to Kraley *et al.* ("Kraley"). In particular, the office action suggests that column 10, lines 53-64 of Kraley describes an electrical energy meter that can be connected to a polyphase electrical service having a wide dynamic range of standard service voltages. However, no where does Kraley discuss that it can be connected to a wide range of service voltages. The cited portion of Kraley is reproduced below:

The watt and var transducer of the present invention may also be used for connection to a three-phase four-wire power line, the wires being labeled A,B,C, neutral. In that case, in effect, three of the transducers shown in FIGS. 1 and 2 are utilized, each comprising a voltage transformer, a current transformer, a modulator, a phase shift circuit and two electronic switches. The first such transducer is connected to lines A, neutral; the second to lines B, neutral; and the third to lines C, neutral. Each of the watt and var outputs are added together by three adders to produce watt and var outputs having a common output terminal at ground potential.

Kraley, column 10, lines 53-64.

While the cited portion arguably discusses multi-phase connection, it does not discuss a wide dynamic range of service voltages.

Also, the office action suggests that "the output is regulated (circuit electrically connected to 52; col 6, ln 16-28) to provide a predetermined output voltage (any one of +13 Volts, +6.2 Volts, -6.2 Volts or -13 Volts) independent of the input voltage." (Office Action

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dated October 20, 2004 at p. 6). Applicants respectfully disagree for at least two reasons. First, there is no teaching nor even a suggestion in the cited portion of Kraley to support the notion that the output voltage is predetermined independent of the input voltage. Second, Kraley does not teach a predetermined voltage, but instead teaches multiple voltages (e.g., +13 Volts, +6.2 Volts, -6.2 Volts or -13 Volts).

Accordingly, applicants respectfully request withdrawal of the rejection of claims 7 and 9 under 35 U.S.C. 102(b) over Kraley.

Next, the office action objects to the drawings under 37 CFR 1.83 (a) allegedly for failing to "show every feature of the invention specified in the claims." (Office Action dated October 20, 2004 at p. 3). In particular, the office action suggests that "it is not apparent what components in the figures correspond to . . . the power supply, for receiving any input voltage within a wide dynamic range of standard service voltages, comprising a transformer having first and second windings in claim 7 and a third winding." With all due respect to the contentions in the office action, applicants respectfully disagree.

The specification and corresponding drawings are replete with discussion of the power supply and its corresponding components. For example, Figure 1 shows a "12 volt switching power supply" as element 20. Also, as noted throughout the specification, Figure 5 provides a schematic wiring diagram of many components including those of the power supply. Moreover, Figure 5 describes, for example 310, 312 and 314 as individual windings of a transformer. Just one example of such discussion is reproduced below:

Referring now to FIG. 5, transformer 300 and switch 302 are shown in greater detail. It will be appreciated that switch 302 is a transistor. At the beginning of each switching cycle, transistor 302 "turns on", i.e. becomes conductive, and magnetizes the core of transformer 300 by applying voltage across the primary 310. At the end of each cycle, transistor 302 turns off and allows the energy stored in the core of transformer 300 to flow to the output of the power supply, which "output" can be generally defined by secondary 312. Simultaneously, energy flows out of the bootstrap or tertiary winding 314 to power the control circuitry 304 through the start/feedback circuit 306.

Accordingly, applicants respectfully request withdrawal of the objection to the drawings under 37 CFR 1.83 (a).

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## **Information Disclosure Statement**

The office action alleged that the information disclosure statement (IDS) filed on October 14, 2003 fails in-part to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. The office action lists certain general provisions regarding foreign prior art without specifically identifying the particular reference numbers. Applicants respectfully assert that the IDS is in compliance with the cited law. Applicants cited the foreign prior art references previously were cited in the parent application No. 10/076,990. Also, in the parent application, the foreign cited art was provided at least with a English abstract and was properly legible.

If the Examiner wishes to continue the stated objection to the IDS, applicants respectfully request specific identification of the references in question and clarification as to the reasons for the stated objection.

Finally, the office action cited certain "publications" as being "cumulative." (Office Action dated August 23, 2004 at p. 7-8). The office action indicates that such "cumulative" publications have "not been considered as to the merits." Applicants are unclear how the Examiner determined that the references were "cumulative" if they were "not considered as to the merits." Without agreeing or disagreeing with the Examiner's characterization of the subject references, applicants respectfully request the Examiner initial and date the properly-submitted subject references.

## **Supplemental Information Disclosure Statement**

In addition to the previously submitted references, applicants submit additional reference material as indicated in the attached PTO form 1449. These references comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Accordingly, applicants respectfully request the Examiner date and initial these reference materials.

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## **CONCLUSION**

In view of the foregoing, applicant respectfully submits that the claims are allowable and that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Vincent J. Roccia at (215) 564-8946, to discuss resolution of any remaining issues.

Date: January 20, 2005

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